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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	May 12	EXTEND option available in structure searching
NEWS 4	May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS 5	May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus
NEWS 6	May 27	CAplus super roles and document types searchable in REGISTRY
NEWS 7	Jun 28	Additional enzyme-catalyzed reactions added to CASREACT
NEWS 8	Jun 28	ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R)
NEWS 9	Jul 12	BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
NEWS 10	Jul 30	BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting
NEWS 11	AUG 02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
NEWS 12	AUG 02	CAplus and CA patent records enhanced with European and Japan Patent Office Classifications
NEWS 13	AUG 02	STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting
NEWS 14	AUG 02	The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
NEWS 15	AUG 04	Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004

NEWS EXPRESS	JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:47:54 ON 04 AUG 2004

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:48:01 ON 04 AUG 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 AUG 2004 HIGHEST RN 721883-12-1
DICTIONARY FILE UPDATES: 3 AUG 2004 HIGHEST RN 721883-12-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading 10735040.str

L1 STRUCTURE UPLOADED

=> is l1
IS IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l1
SAMPLE SEARCH INITIATED 14:48:24 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 171 TO ITERATE

100.0% PROCESSED 171 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2636 TO 4204

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

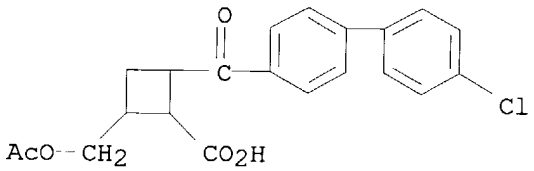
=> s l1 sss full
FULL SEARCH INITIATED 14:48:33 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3577 TO ITERATE

100.0% PROCESSED 3577 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

L3 9 SEA SSS FUL L1

=> d l3 1-9

L3 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 291298-90-3 REGISTRY
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H19 Cl O5
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

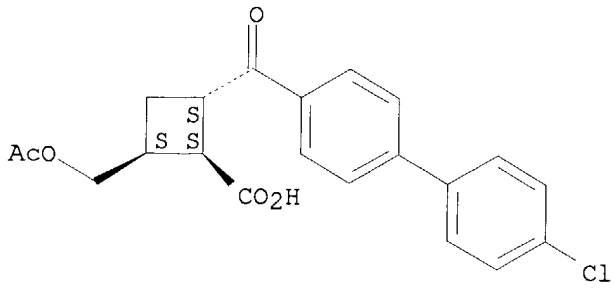


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179798-13-1 REGISTRY
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4R)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.alpha.,4.beta.)-
FS STEREOSEARCH
MF C21 H19 Cl O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Relative stereochemistry.

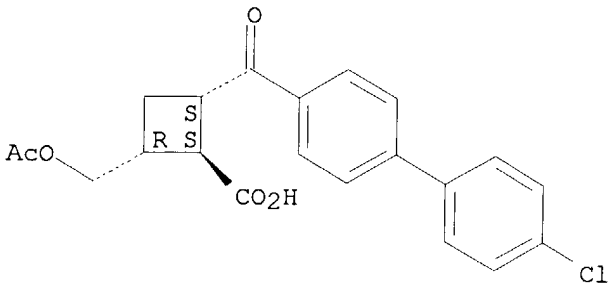


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179798-12-0 REGISTRY
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4R)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.beta.,4.beta.)-
FS STEREOSEARCH
MF C21 H19 Cl O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

Relative stereochemistry.

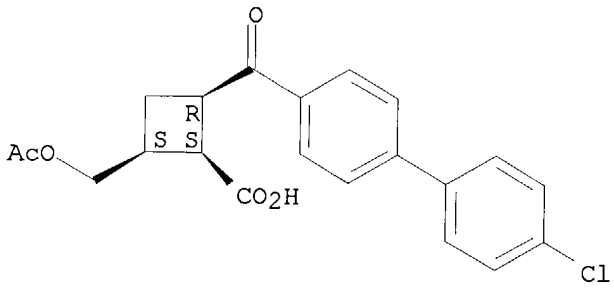


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179798-11-9 REGISTRY
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.alpha.,4.alpha.)-
FS STEREOSEARCH
MF C21 H19 Cl O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Relative stereochemistry.

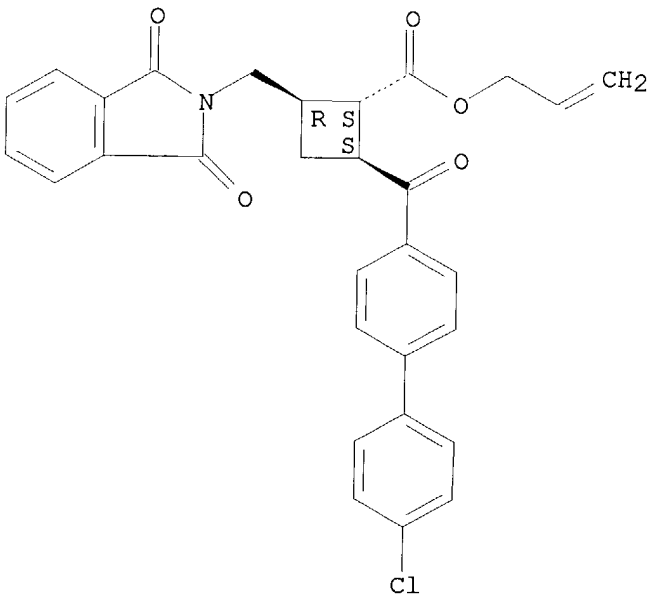


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179548-98-2 REGISTRY
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester, (1.alpha.,2.beta.,4.beta.)-
FS STEREOSEARCH
MF C30 H24 Cl N O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Relative stereochemistry.

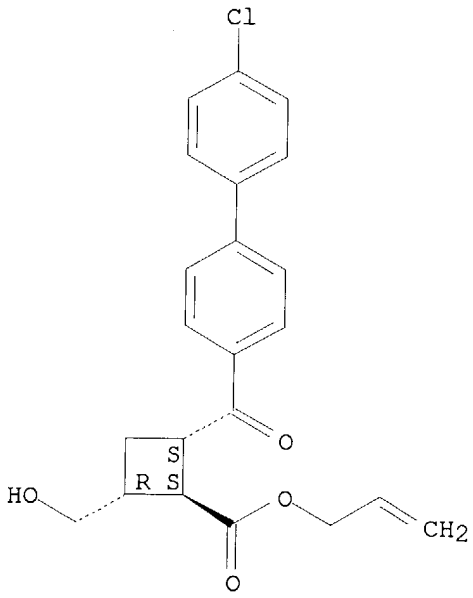


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179548-97-1 REGISTRY
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
(hydroxymethyl)-, 2-propenyl ester, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
(hydroxymethyl)-, 2-propenyl ester, (1.alpha.,2.beta.,4.beta.)-
FS STEREOSEARCH
MF C22 H21 Cl O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Relative stereochemistry.

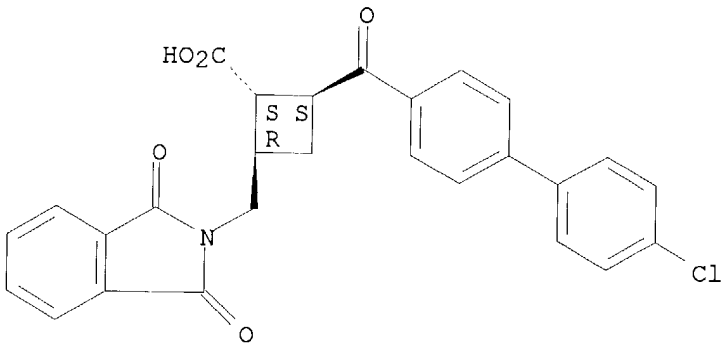


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179547-41-2 REGISTRY
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, (1R,2R,4S)-rel- (9CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-,
(1.alpha.,2.beta.,4.beta.)-
FS STEREOSEARCH
MF C27 H20 Cl N O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES
(Uses)

Relative stereochemistry.

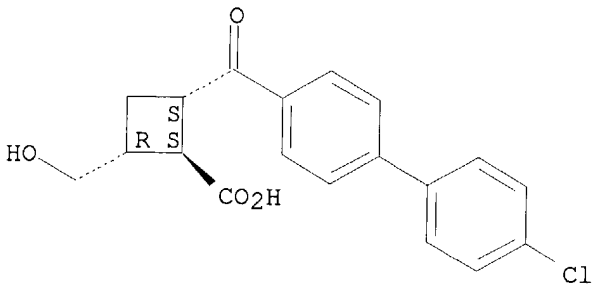


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179547-40-1 REGISTRY
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
(hydroxymethyl)-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
(hydroxymethyl)-, (1.alpha.,2.beta.,4.beta.)-
FS STEREOSEARCH
MF C19 H17 Cl O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

Relative stereochemistry.

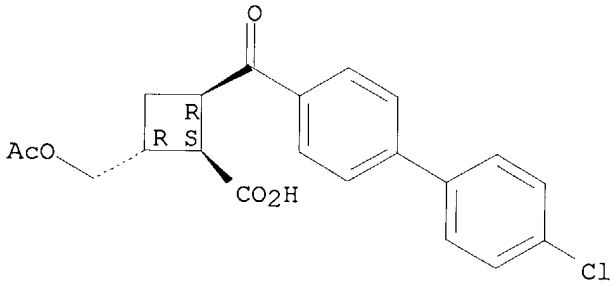


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 179547-39-8 REGISTRY
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.beta.,4.alpha.)-
FS STEREOSEARCH
MF C21 H19 Cl O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.19	172.40

FILE 'CAPLUS' ENTERED AT 14:49:31 ON 04 AUG 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 4 Aug 2004 VOL 141 ISS 6
FILE LAST UPDATED: 3 Aug 2004 (20040803/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 4 L3

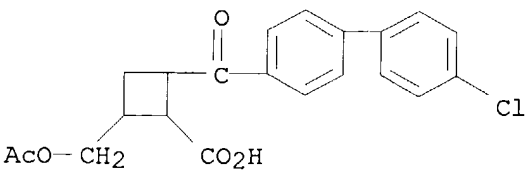
=> d ibib abs hitstr 1-4

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:849718 CAPLUS
DOCUMENT NUMBER: 136:160844
TITLE: 3D-quantitative structure activity relationships of biphenyl carboxylic acid MMP-3 inhibitors: exploring automated docking as alignment method
AUTHOR(S): Muegge, Ingo; Podlogar, Brent L.
CORPORATE SOURCE: Bayer Research Center, West Haven, CT, 06516, USA
SOURCE: Quantitative Structure-Activity Relationships (2001), 20(3), 215-222
CODEN: QSARDI; ISSN: 0931-8771
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of CoMFA models have been derived from docking-based and atom-based alignments. The statistics of these approaches has been compared to det. whether a docking approach can be employed as an automated alignment tool for the development of 3D-QSAR models. Using a well-characterized training set of 51 biphenyl carboxylic acid MMP-3 inhibitors, the docking-based alignment provided by a DOCK4/PMF-scoring protocol has yielded statistically significant, cross-validated CoMFA models comparable to those derived with a traditional atom-based alignment technique. Field fit minimization has been applied to refine the atom-based and docking-based alignments. The refinement appears to be beneficial for the docking-based approach. For the atom-based alignment, however, field-fit refinement has not resulted in improved CoMFA models. The statistically best CoMFA model has been created by the atom-based alignment that has been found, however, to be inconsistent with the stromelysin crystal structure. The docking alignment refined by field-fit alignment has resulted in a final alignment that is consistent with the crystal structure and only slightly statistically inferior to the atom-based aligned CoMFA model. The results show the ability of an automated docking/field-fit alignment technique to provide self-consistent CoMFA alignments.

IT **291298-90-3**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(3D-QSAR of biphenyl carboxylic acid MMP-3 inhibitors exploring automated docking as an alignment method)

RN 291298-90-3 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:439095 CAPLUS
DOCUMENT NUMBER: 133:219279
TITLE: Evaluation of docking/scoring approaches: a comparative study based on MMP3 inhibitors
AUTHOR(S): Ha, Sookhee; Andreani, Romana; Robbins, Arthur; Muegge, Ingo
CORPORATE SOURCE: Bayer Research Center, West Haven, CT, 06516, USA
SOURCE: Journal of Computer-Aided Molecular Design (2000), 14(5), 435-448
CODEN: JCADEQ; ISSN: 0920-654X
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

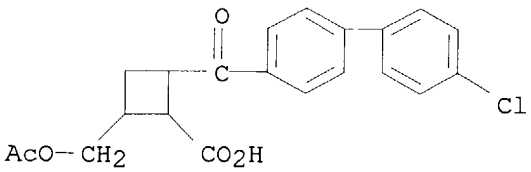
AB An increasing no. of docking/scoring programs are available that use different sampling and scoring algorithms. A reliable scoring function is the crucial element of such approaches. Comparative studies are needed to evaluate their current capabilities. DOCK4 with force field and PMF scoring as well as FlexX were used to evaluate the predictive power of these docking/scoring approaches to identify the correct binding mode of 61 MMP-3 inhibitors in a crystal structure of stromelysin and also to rank them according to their different binding affinities. It was found that DOCK4/PMF scoring performs significantly better than FlexX and DOCK4/FF in both ranking ligands and predicting their binding modes. Most notably, DOCK4/PMF was the only scoring/docking approach that found a significant correlation between binding affinity and predicted score of the docked inhibitors. However, comparing only those cases where the correct binding mode was identified (scoring highest among sampled poses), FlexX showed the best fine tuning (lowest rmsd) in predicted binding modes. The results suggest that not so much the sampling procedure but rather the scoring function is the crucial element of a docking program.

IT **291298-90-3**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibitor; comparative evaluation of docking/scoring approaches based on MMP3 inhibitors)

RN 291298-90-3 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

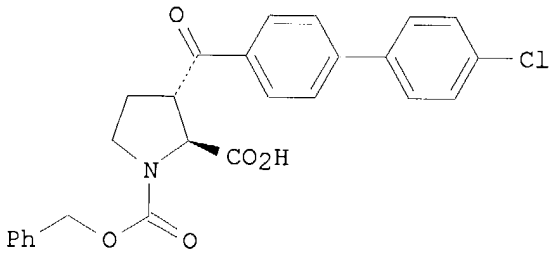
ACCESSION NUMBER: 1998:534889 CAPLUS
DOCUMENT NUMBER: 129:161412
TITLE: Derivatives of substituted 4-biarylbutyric acid as matrix metalloprotease inhibitors
INVENTOR(S): Kluender, Harold Clinton Eugene; Benz, Guenter Hans Heinz Herbert; Brittelli, David Ross; Bullock, William
Harrison; Combs, Kerry Jeanne; Dixon, Brian Richard; Schneider, Stephan; Wood, Jill Elizabeth; Vanzandt, Michael Christopher; Wolanin, Donald John; Wilhelm, Scott M.
PATENT ASSIGNEE(S): Bayer Corporation, USA
SOURCE: U.S., 109 pp., Cont.-in-part of U.S. Ser. No. 339,846.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5789434	A	19980804	US 1995-539409	19951106
CA 2201863	AA	19960523	CA 1995-2201863	19951109
CN 1163604	A	19971029	CN 1995-196209	19951109
CN 1121376	B	20030917		
HU 78083	A2	19990830	HU 1998-233	19951109
PT 790974	T	20021129	PT 1995-940572	19951109
ES 2181803	T3	20030301	ES 1995-940572	19951109
ZA 9509647	A	19970814	ZA 1995-9647	19951114
TW 413675	B	20001201	TW 1995-84112045	19951114
US 5874473	A	19990223	US 1997-864666	19970528
US 5886024	A	19990323	US 1997-865325	19970528

US 5854277	A	19981229	US 1997-865639	19970530
US 5859047	A	19990112	US 1997-866798	19970530
US 5861427	A	19990119	US 1997-866679	19970530
US 5861428	A	19990119	US 1997-866680	19970530
US 5886043	A	19990323	US 1997-866778	19970530
US 6166082	A	20001226	US 1998-57679	19980409
PRIORITY APPLN. INFO.:			US 1994-339846	A2 19941115
			US 1995-462729	B1 19950605
			US 1995-463490	B1 19950605
			US 1995-463580	B1 19950605
			US 1995-463794	B1 19950605
			US 1995-464253	B1 19950605
			US 1995-465626	B1 19950605
			US 1995-539409	A 19951106

OTHER SOURCE(S): MARPAT 129:161412

GI



I

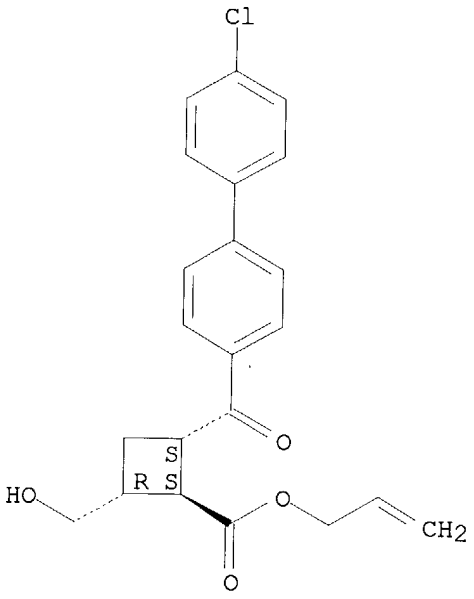
AB Matrix metalloprotease (MMP) inhibitors TxA-B-D-E-G [I; T = halo, haloalkyl, alkynyl, (un)substituted alkyl or alkenyl; x = 0, 1, 2; A, B = arom. or heteroarom. ring; D = CO, CH(OH), CH2, C:NOH, C(S); E = substituted carbon chain; G = PO3H2, CO2H, CO2NH2, 5-tetrazolyl, etc.] and their pharmaceutically acceptable salts were prepd. In particular, I [A = C6H4; B = 1,4-C6H4; E = certain substituted THF, tetrahydrothiophene, or pyrrolidine divalent radicals] with MMP inhibitory activity, and their pharmaceutically acceptable salts, are claimed. For instance, claimed title compd. II was prepd. from L-pyroglutaminol in 9 steps. The synthesized compds. (444) were assayed for inhibition of MMP-3, MMP-9, and MMP-2. For instance, II had corresponding IC50 values of 103, 381, and 35 nM. I inhibited tumor growth and metastasis in animal models, and inhibited cartilage lesions in a guinea pig model of osteoarthritis.

IT **179548-97-1P 179548-98-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)

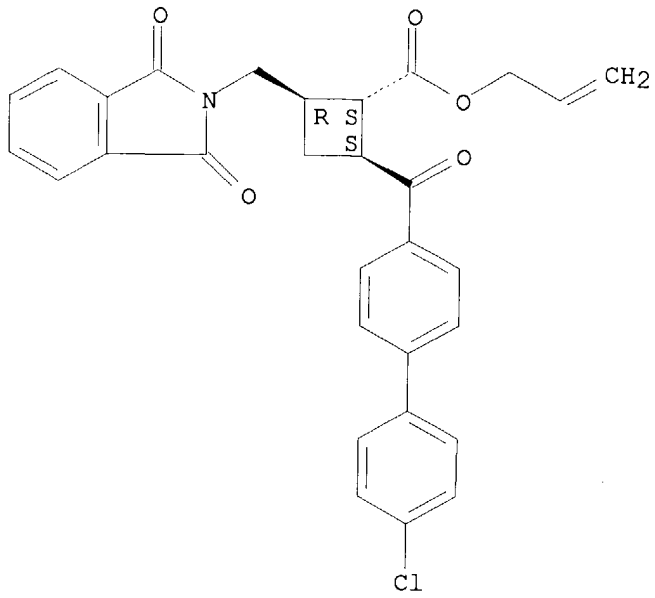
RN 179548-97-1 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
(hydroxymethyl)-, 2-propenyl ester, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 179548-98-2 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester,
(1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

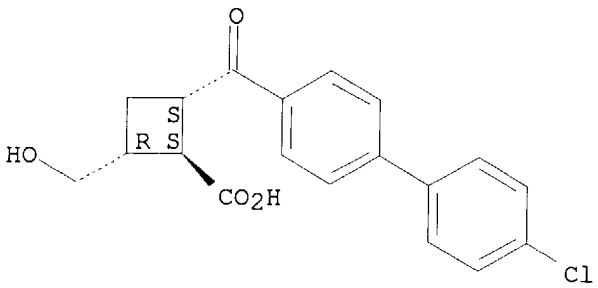
Relative stereochemistry.



IT **179547-40-1P 179798-12-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)

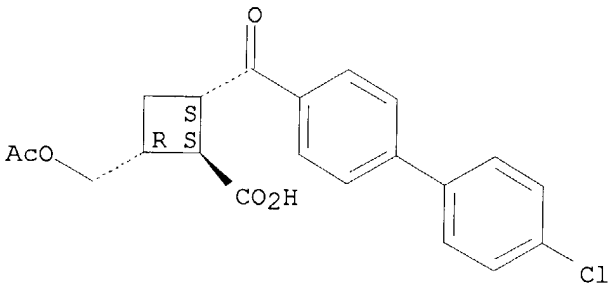
RN 179547-40-1 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-(hydroxymethyl)-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 179798-12-0 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

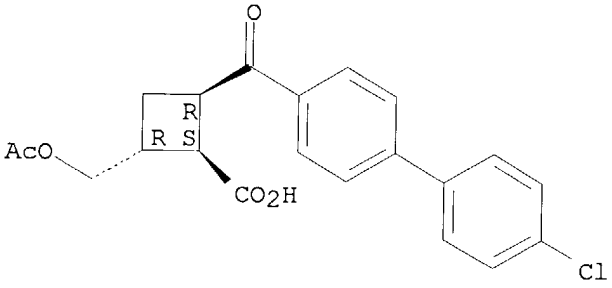


IT **179547-39-8P 179547-41-2P 179798-11-9P**
179798-13-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of substituted biarylbutyric or biarylpentanoic acids and
derivs. as matrix metalloprotease inhibitors)

RN 179547-39-8 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4S)-rel- (9CI) (CA INDEX NAME)

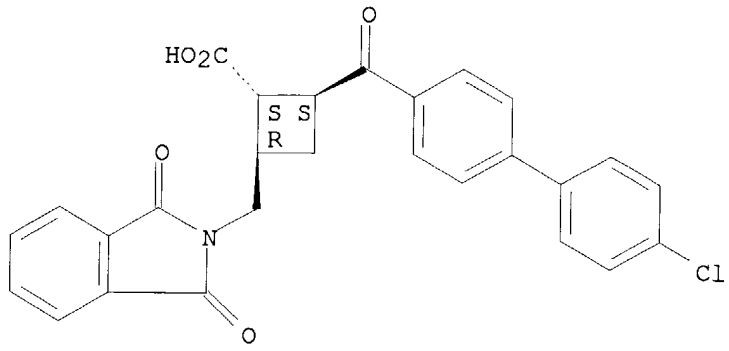
Relative stereochemistry.



RN 179547-41-2 CAPLUS

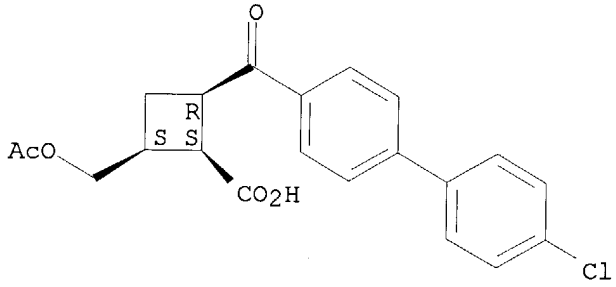
CN Cyclobutanecarboxylic acid, 2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



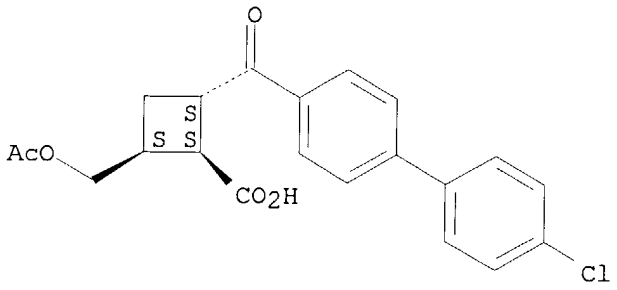
RN 179798-11-9 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 179798-13-1 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:476807 CAPLUS

DOCUMENT NUMBER: 125:142275
TITLE: Substituted 4-biarylbutyric or 5-biarylpentanoic acids and derivatives as matrix metalloprotease inhibitors
INVENTOR(S): Kluender, Harold Clinton Eugene; Benz, Guenter Hans Heinz Herbert; Brittelli, David Ross; Bullock, William Harrison; Combs, Kerry Jeanne; Dixon, Brian Richard; Schneider, Stephan; Wood, Jill Elizabeth; Vanzandt, Michael Christopher; et al.
PATENT ASSIGNEE(S): Bayer A.-G., USA
SOURCE: PCT Int. Appl., 263 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9615096	A1	19960523	WO 1995-US14002	19951109
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2201863	AA	19960523	CA 1995-2201863	19951109
AU 9641975	A1	19960606	AU 1996-41975	19951109
AU 702317	B2	19990218		
EP 790974	A1	19970827	EP 1995-940572	19951109
EP 790974	B1	20020814		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9509686	A	19970930	BR 1995-9686	19951109
CN 1163604	A	19971029	CN 1995-196209	19951109
CN 1121376	B	20030917		
JP 10509146	T2	19980908	JP 1995-516097	19951109
HU 78083	A2	19990830	HU 1998-233	19951109
RU 2159761	C2	20001127	RU 1997-110108	19951109
EE 3435	B1	20010615	EE 1997-210	19951109
PL 183549	B1	20020628	PL 1995-320285	19951109
AT 222230	E	20020815	AT 1995-940572	19951109
PT 790974	T	20021129	PT 1995-940572	19951109
ES 2181803	T3	20030301	ES 1995-940572	19951109
ZA 9509647	A	19970814	ZA 1995-9647	19951114
FI 9702062	A	19970714	FI 1997-2062	19970514
NO 9702220	A	19970714	NO 1997-2220	19970514
US 5874473	A	19990223	US 1997-864666	19970528
US 5886024	A	19990323	US 1997-865325	19970528
US 5854277	A	19981229	US 1997-865639	19970530
US 5859047	A	19990112	US 1997-866798	19970530
US 5861427	A	19990119	US 1997-866679	19970530
US 5861428	A	19990119	US 1997-866680	19970530
US 5886043	A	19990323	US 1997-866778	19970530

PRIORITY APPLN. INFO.:

US 1994-339846	A	19941115
US 1995-462729	B1	19950605
US 1995-463490	B1	19950605
US 1995-463580	B1	19950605
US 1995-463794	B1	19950605
US 1995-464253	B1	19950605
US 1995-465626	B1	19950605
WO 1995-US14002	W	19951109

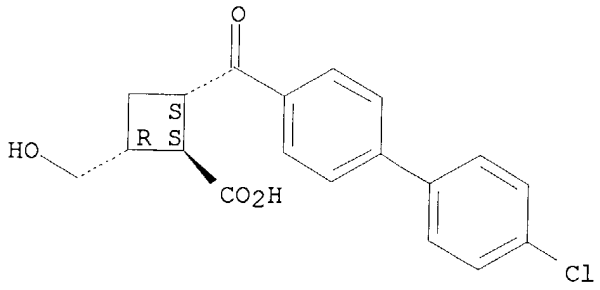
OTHER SOURCE(S): MARPAT 125:142275

AB Matrix metalloprotease inhibitors TxA-B-D-E-G [Tx = substituent such as halo, C1-C10 alkyl, or cyanoalkenyl; x = 0, 1, 2; A, B = arom. or heteroarom. ring; D = CO, CH(OH), CH2, C:NOH, C(S); E = substituted carbon chain; G = PO3H2, CO2H, CO2NH2, etc.] and their pharmaceutically acceptable salts were prepd. Thus, (S)-.gamma.-oxo-4'-(pentyloxy)-.alpha.-(3-phenylpropyl)-[1,1'-biphenyl]-4-butanoic acid (86) was prepd. via alkylation of di-Et (3-phenylpropyl)malonate with 2,4'-dibromoacetophenone, followed by sapon.-monodecarboxylation, reaction with 4-methoxybenzeneboronic acid, Me ether cleavage, and O-pentylation. The synthesized compds. (444) were assayed for inhibition of MMP-3, MMP-9, and MMP-2. Using compds. such as 86, the no. of tumor metastases was decreased between 38 and 49% as compared to the control. The title compds. were also assayed for inhibition of cartilage lesions in a guinea pig model of osteoarthritis.

IT **179547-40-1P 179798-12-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)

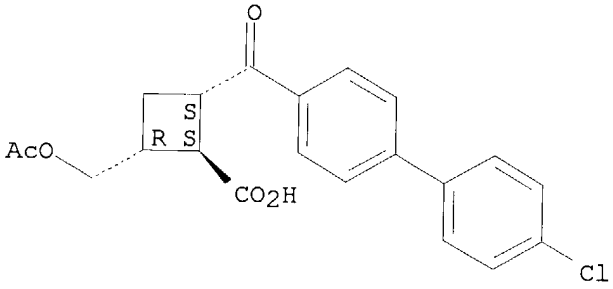
RN 179547-40-1 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-(hydroxymethyl)-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



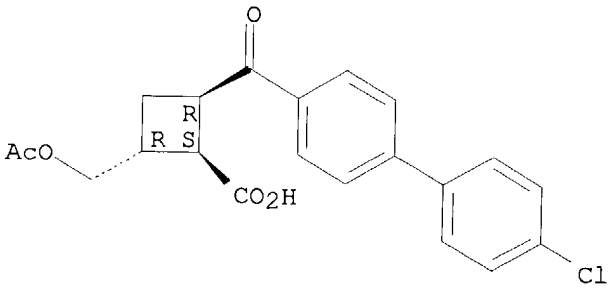
RN 179798-12-0 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



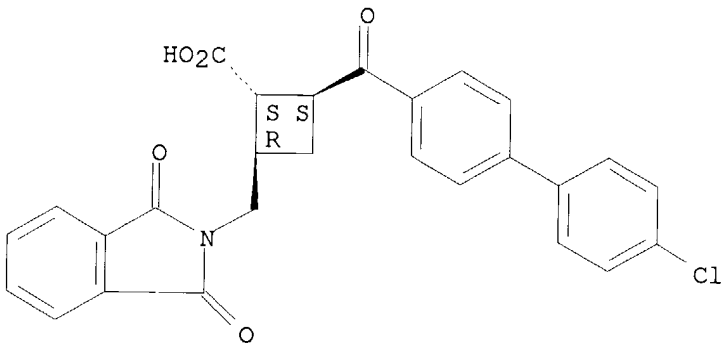
IT **179547-39-8P 179547-41-2P 179798-11-9P 179798-13-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)
RN 179547-39-8 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



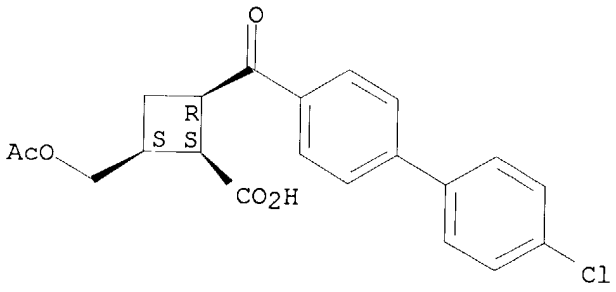
RN 179547-41-2 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, (1R,2R,4S)-rel- (9CI)
(CA INDEX NAME)

Relative stereochemistry.



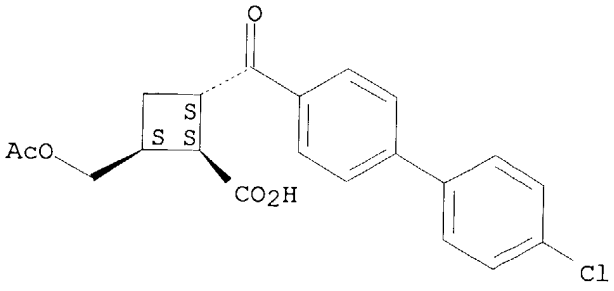
RN 179798-11-9 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-
biphenyl]-4-yl)carbonyl]-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

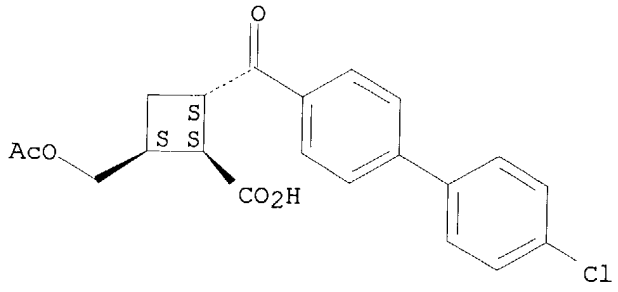
Relative stereochemistry.



RN 179798-13-1 CAPLUS
CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-
biphenyl]-4-yl)carbonyl]-, (1R,2R,4R)-rel- (9CI) (CA INDEX NAME)

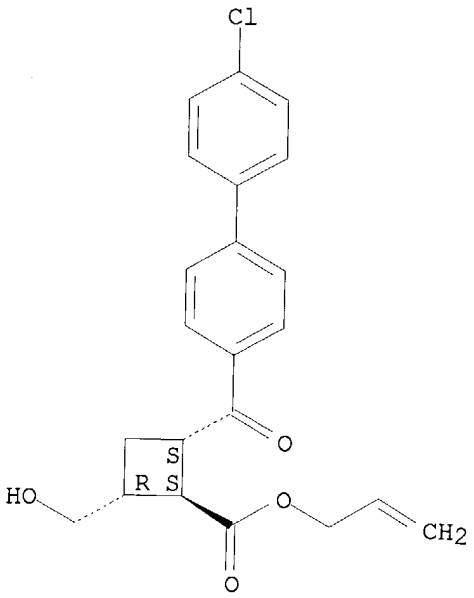
Relative stereochemistry.





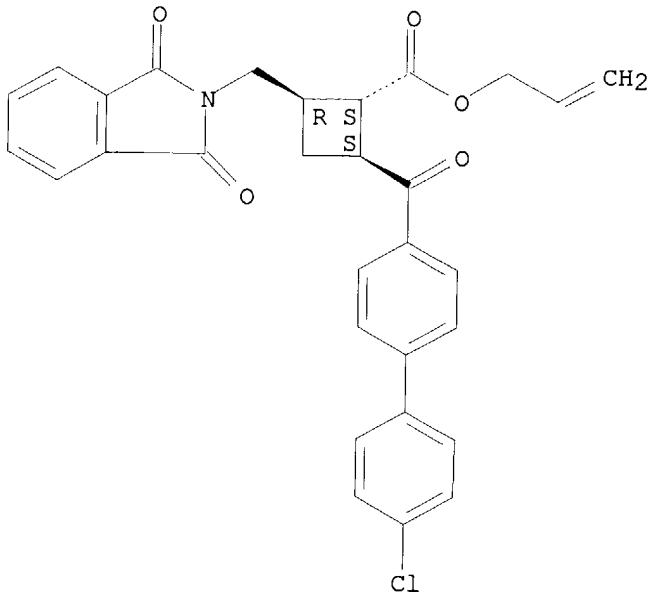
IT **179548-97-1P 179548-98-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)
RN 179548-97-1 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
(hydroxymethyl)-, 2-propenyl ester, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 179548-98-2 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester,
(1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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L2            0 S L1
L3            9 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 14:49:31 ON 04 AUG 2004
L4            4 S L3

=>  d l1
L1 HAS NO ANSWERS
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


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---Logging off of STN---


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Executing the logoff script...
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=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	22.75	195.15

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.94	-2.94

STN INTERNATIONAL LOGOFF AT 14:53:15 ON 04 AUG 2004